SEMESTER END EXAMINATION JUNE-2023

Course Name: - B.Tech **Semester:- 2nd**

Paper Name: - Manufacturing Process **Paper Code:- TES-204**

Time - 3 Hrs + 20 minutes per hour extra time for V.I. & examinees with writer. **Max Marks-70**

समय– 3 घण्टे + 20 मिनट प्रति घंटे अतिरिक्त–दृष्टिबाधित एवं राइट लेखक परीक्षार्थियों के लिए। अधिकतम अंक–70

Instructions:

- The question paper consists of three sections namely A, B, C. All sections are compulsory.
- Section A- Each question carries 3 mark. All questions are compulsory.
- Section B- Answer any 5 out of 7 given questions in maximum one hundred fifty (150) words. Each question carries 7 marks.
- Section C- Answer any 2 out of 3 given questions in maximum three hundred (300) words. Each question carries 10 marks.

निर्देश:

- प्रश्न पत्र में तीन खण्ड अ, ब, व स हैं। सभी खण्ड अनिवार्य हैं।
- खण्ड–अ में प्रत्येक प्रश्न तीन अंक का है। सभी प्रश्न अनिवार्य हैं।
- खण्ड–ब में सात प्रश्नों में से किन्हीं पाँच प्रश्नों के उत्तर अधिकतम 150 शब्दों में दें। प्रत्येक प्रश्न सात अंक का है।
- खण्ड–स में तीन प्रश्नों में से किन्हीं दो प्रश्नों के उत्तर अधिकतम 300 शब्दों में दें। प्रत्येक प्रश्न दस अंक का है।

Section – A (खण्ड–अ)

Objective Questions (वस्तुनिष्ठ प्रश्न)

1. Answer all the following questions. **5×3 =15**
निम्नलिखित सभी प्रश्न अनिवार्य हैं।

i) Steel contains
a) 80% or more iron
b) 50% or more iron
c) Alloying elements like chromium, tungsten nickel and copper
d) Elements like phosphorus, sulphur and silicon in varying quantities

ii) Which of the following is not a requirement of a good pattern?
a. It should be light in weight to handle easily
b. It should have low strength to break it and to remove casting easily
c. It should be smooth to make casting surface smooth
d. none of the above

iii) Which of the following metal forming processes performs squeezing out of material through a hole?
a) Forging
b) Extrusion
c) Drawing
d) Rolling

iv) Which of the following process is not grouped under metal removal process?
a) Boring
b) Rolling
c) Tumbling
d) Milling

Scanned with OKEN Scanner

v) In arc welding, arc initiation voltage is of the order
   a) 20-60V
   b) 60-100V
   c) 100-140V
   d). 140-180V

Section - B (खण्ड–ब)
Short Answer Questions (लघुउत्तरीय प्रश्न)

2. Answer any five of the following questions in maximum 150 words. **5×7=35**
निम्नलिखित में से किन्हीं पाँच प्रश्नों के उत्तर अधिकतम 150 शब्दों में दें।

i) Explain the role of engineering materials in engineering.

ii) Differentiate between Brazing and Soldering with their applications

iii) Differentiate between Hot and Cold working manufacturing process.

iv) Explain different types of pattern with sketch using in sand casting.

v) Difference between:- (a). Bloom and Billet, (b). Drawing and Extrusion Process.

vi) Describe the working and specification of Drilling Machine.

vii) Describe *seven types* of casting defects with sketch.

Section - C (खण्ड–स)
Descriptive Questions (विवरणात्मक प्रश्न)

3. Answer any two of the following question in maximum 300 words. **2×10=20**
निम्नलिखित में से किन्हीं दो प्रश्नों के उत्तर अधिकतम 300 शब्दों में दें।

I. Explain about cupola furnace in details with sketch.

II. Describe the following machining operation with sketch Like: (a) Facing, (b) Turning, (c) Parting, (d) Grooving and (e) Knurling.

III. Give classification of joints and described the Gas welding techniques with sketch.

.....

Scanned with OKEN Scanner